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(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
1 April 2004 (01.04.2004)

PCT

(10) International Publication Number
WO 2004/026017 A3

(51) International Patent Classification⁷: **B21C 37/30**

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(21) International Application Number:
PCT/US2003/025742

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(22) International Filing Date: 18 August 2003 (18.08.2003)

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

(26) Publication Language: English

[Continued on next page]

(30) Priority Data:
60/412,177 20 September 2002 (20.09.2002) US

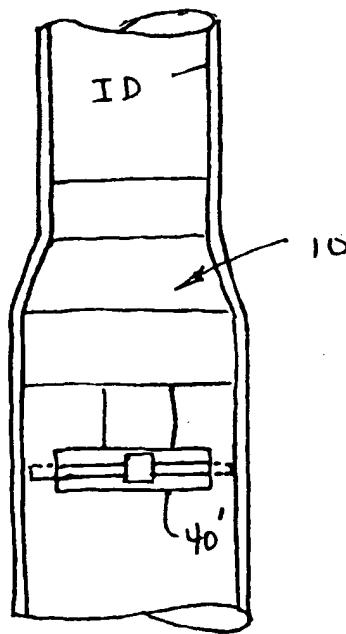
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(54) Title: RESIDUAL STRESSES IN EXPANDABLE TUBULAR CASING

(57) Abstract: An elongated section of steel tubing (30) has an outer circumferential surface and an inner circumferential surface defining an elongated axial passage through the tubing. An expansion mandrel (10) is moved through the tubing for radially expanding the tubing. An impact member (40) is provided for travel through the length of the axial passage. A plurality of movable impactors (42) are mounted to extend from the impact member. The impactors are driven for repeated contact with the inner circumferential surface as the impact member is moved through the tubing subsequent to the expansion mandrel for contacting the expanded inner circumferential surface along the entire length of the axial passage. Movement of the impactors is ultrasonic.



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SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

(88) Date of publication of the international search report:

15 July 2004

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/25742

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B21C 37/30
US CL : 72/370.06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 72/370.06, 370.08, 53, 75

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2,929,741 A (STROCK et al.) 05 January 1960, (05-01-1960), whole doc.	23
—		15-19
Y		
X	US 4,491,001 A (YOSHIDA et al.) 01 January 1985 (01-01-1985), whole doc.	1-3, 5-7, 21, 22
—		
Y		4, 8, 15-19
Y	US 6,343,495 B1 (CHEPPE et al.) 05 February 2002 (05-02-2002), whole doc.	4, 8

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See patent family annex.

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Date of the actual completion of the international search

Date of mailing of the international search report

03 May 2004 (03.05.2004)

27 MAY 2004

Name and mailing address of the ISA/US

Authorized officer

Mail Stop PCT, Attn: ISA/US

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